

TITLE OF THE INVENTION

INPUT APPARATUS AND DEVICE, METHOD FOR CONTROLLING THE
SAME, AND STORAGE MEDIUM STORING A PROGRAM FOR
EXECUTING THE METHOD

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BACKGROUND OF THE INVENTION

Field of the Invention

10 [0001] The present invention relates to an input apparatus and device for performing operations for a plurality of devices, a method for controlling the same, a program for executing the method, and a storage medium storing the program so as to be readable by a computer.

Description of the Related Art

15 [0002] A method for operating a plurality of computers by a single input apparatus has been known in which the input apparatus is connected to the plurality of computers via wires, a switch is provided between the input apparatus and the plurality of computers, and connection between the input apparatus and the plurality of computers is physically switched by the switch.
20 For example, a rotary switch is used as the switch, and the input apparatus is physically connected to one of the plurality of computers by switching the rotary switch.

[0003] Since a signal line from the input apparatus and signal lines from the plurality of computers are connected to the switch, the number of wires is
25 large, resulting in difficulty in handling the wires.

[0004] Recently, input apparatuses using infrared rays or weak radio

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waves (hereinafter termed "wireless mice") have appeared.

[0005] When performing one-to-one communication between a wireless mouse and the main body of a computer, in order to prevent cross talk in an environment in which a plurality of pairs of a wireless mouse and a computer
5 are present as in an office, it is necessary to set a frequency channel for each of the pairs. However, which frequency is currently vacant without being used cannot be easily known, and therefore it is difficult set a frequency.

[0006] A description will now be provided of a conventional method for operating a plurality of computers by a single wireless mouse, with reference
10 to FIG. 8.

[0007] A system shown in FIG. 8 includes two computers A 801 and B 802, and a wireless mouse 803 for selecting and operating one of the two computers A 801 and B 802.

[0008] A device number for identifying a computer is provided in advance
15 for each of the computers A 801 and B 802. For example, device numbers "1" and "2" are set in the computers A 801 and B 802, respectively.

[0009] The user assigns the device number of a computer to be operated, through the wireless mouse 803. For example, when the user intends to operate the computer A 801, the device number "1" of the computer A 801 is
20 assigned through the wireless mouse 803.

[0010] FIG. 9 is a diagram illustrating the format of data to be transmitted from the wireless mouse 803 to the computer A 801 or B 802. A number "1" indicating the device number of the computer A 801 is set as the number of the transmission destination, and the device number of the
25 wireless mouse 803 is set as the number of the transmitter. Mouse data indicating the contents to be processed by the computer is also stored in the

data. Check-sum data is added at the last of the data.

[0011] The computers A 801 and B 802 receive the data shown in FIG. 9 from the wireless mouse 803. When the number of the transmission destination stored in the received data is the device number "1" of the computer A 801, the computer A 801 performs processing in accordance with the contents shown in the mouse data. The computer B 802 abandons the received data because the device number of the computer B 802 is not "1". The computers A 801 and B 802 check the number of the transmission destination in the same manner every time data is transmitted from the wireless mouse 803.

[0012] According to this method, a wireless mouse and all computers perform communication with the same frequency, and the wireless mouse is linked to a specific computer by assigning the device number of the concerned computer (i.e., by adding data).

[0013] However, the above-described conventional method still has the following problems.

[0014] First, the user must check the device number of each computer, and cannot easily select a specific device.

[0015] Furthermore, since the number of the transmission destination and the number of the transmitter are added to each of all data transmitted from the wireless mouse, the overhead of data is large. In addition, since a device number must be provided for data generated every time the click and the movement of the mouse are performed, the overhead of data is large.

[0016] In addition, all the computers must receive all data transmitted from the wireless mouse, and each of the computers must determine whether or not the number of the transmission destination corresponds to the number